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Prevalence and awareness of hepatitis B virus carrier status in Italy

Knowledge of hepatitis B surface antigen (HBsAg) status is the first and easiest preventive measure for reducing diffusion of hepatitis B virus (HBV) in sexual partners, family members and, more in general, in the community. To assess the extent of knowledge of HBsAg status in an Italian population, we have reanalysed data for subjects interviewed as controls in a case-control study of risk factors for lichen planus conducted in northern Italy between 1989 and 1990.¹ A total of 1031 subjects (529 men, 502 women, median age 47 years, range 16-88 years) were interviewed in the outpatient services of participating centres for dermatological conditions other than lichen planus (such as pityriasis rosea, urticaria, psoriasis, neoplastic skin diseases, exanthemas, skin infections, burns). Subjects were not included if they had cutaneous diseases associated with liver dysfunction. Ten of the 1031 subjects (1.0%) declared at the interview that they were HBsAg positive. At the time of the interview, a serum sample was also taken. Based on serological determinations, 27 subjects (2.7%), including the 10 patients who reported HBsAg positivity, were HBsAg carriers. Although our controls are not a representative sample of the Italian population, they are probably a sample not biased toward a lower than average attention to health problems. As a consequence, our results suggest that a large proportion of Italian HBsAg carriers are unaware of their condition.

The estimated prevalence of HBsAg carriers in Italy lies between 2% and 4% (2-3); and, based on our results, 1.2-2.5 % of Italian people (about 700 000-1 400 000 subjects) may be unaware of their HBsAg carrier status, with obvious consequences in terms of public health, that is, diffusion of HBV infection.

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In vitro susceptibility of *Trichomonas vaginalis* strains to metronidazole—a Nigerian experience

Recent reports have indicated the prevalence of cases of refractory vaginal trichomoniasis associated with isolates that were resistant to metronidazole.³⁻⁵

We have tested the in vitro susceptibility to metronidazole of 41 freshly isolated local strains of *Trichomonas vaginalis* at Jos University Teaching Hospital, Nigeria to determine the possible emergence of resistant strains in our locality. The strains were isolated using the trichomonas medium as modified by Adebayo, 1988. The minimum inhibitory concentrations (M.I.C.) of metronidazole to the isolated strains were determined using the disc broth method of Smith and DiDomenico.⁷

The minimum inhibitory concentration ranged from less than 0.03 mcg/ml to 2.0 mcg/ml, using 10⁵ organisms per millilitre inoculum size and at 2 days incubation period. Thirty strains (73.17%) had M.I.C. of less than 0.03mcg/ml, while only 3 (7.32%) had the highest prevalent M.I.C. of 2.0 mcg/ml (see table)

Table Activity in vitro of metronidazole against *T. Vaginalis* (minimum inhibitory concentration)

M.I.C. (Mcg/ml)	Number of sensitive strains	% Sensitivity
< 0.03	30	73.17
0.06	3	7.32
0.25	1	2.43
0.50	2	4.88
1.0	2	4.88
2.0	3	7.32
Total	41	100

It is therefore concluded that the *Trichomonas vaginalis* strains in our locality are still very sensitive to metronidazole, and any treatment failures may be due to non-compliance and re-infection on the part of the patients. Also the cure of vaginal trichomoniasis does not simply have a direct relationship between susceptibility of the organism and drug dosage, but probably depends on a complex interaction of several factors including drug susceptibility, intra-vaginal redox potential which may regulate the amount of drug taken up by the parasite⁵ and the accompanying vaginal microflora which may modify the amount of available drug in situ.²

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STD Diagnostics Initiative

Sexually transmitted diseases (STDs) are an important cause of morbidity and mortality worldwide. In many developing countries the incidence of treatable STDs continues to rise and in some countries has reached epidemic proportions. Both genital ulcer disease and non-ulcerative STDs are associated with a three- to five-fold increased risk of human immunodeficiency virus (HIV) transmission.

In light of the prevalence of STDs in many countries, work is ongoing to develop or strengthen STD control programs in many parts of the world. An integral part of this effort is the identification, development, and introduction of affordable diagnostic tests appropriate for use in resource-limited health care settings, particularly those serving women of reproductive age in whom most infections are asymptomatic. To adequately meet global need, these diagnostics must be:

- *Inexpensive*—cost to the provider of less than US\$1.00 per patient
- *Simple*—minimal training and simple or no equipment required
- *Rapid*—results available before patient leaves clinic
- *Convenient*—specimens simple to collect, socioculturally acceptable, minimal preparation required
- *Stable*—reagents have long shelf life, no refrigeration required
- *Functional*—packaged simply, low cost
- *Accurate*—appropriately sensitive and specific, taking into account the potential morbidity and cost associated with undetected infection and the cost of treatment

To stimulate and sustain the development and/or adaptation of appropriate STD diagnostics, the STD Diagnostics Initiative was formed in November 1990. The goal of this multilateral Initiative is to facilitate the development and distribution of affordable diagnostic tests appropriate for use in resource-limited settings and to help integrate these tests into STD prevention and control programs. In working toward this goal, the Initiative interacts with researchers, manufacturers, STD and maternal and child health program managers, clinicians, laboratory workers, and representatives of international health and donor agencies. At present, the Initiative's interests are focussed on:

- Chlamydial and gonococcal diagnostic tests or indicators, primarily for women, which would reduce the incidence of reproductive tract complications of infection and the expense of treatment.

- Simple diagnostic tests or simplified test procedures for STD pathogens (i.e. *Treponema pallidum*, *Haemophilus ducreyi*, HSV) which are associated with increased risk of HIV transmission.
- Simple indicators which can be effectively used with syndromic algorithms.
- Serological tests for *T pallidum*, HSV-2, and *H ducreyi* for epidemiological surveillance and evaluation in STD/AIDS control programs.

For more information about the Initiative, please contact the Secretariat for the STD Diagnostics Initiative, Program for Appropriate Technology in Health (PATH), 4 Nickerson Street, Seattle, Washington 98109-1699, U.S.A.

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HIV disease in Africans of high social class

The majority of research on AIDS in Africa has been performed in Government institutions, which tend to be used by the poorest members of society. Few studies have elicited the clinical presentations of HIV disease in those who are affluent, or have described the epidemiological features in this group.^{1,2}

Discharge data were collected retrospectively on all admissions who were HIV positive on a general medical ward at the Aga Khan Hospital (AKH), Nairobi, Kenya, between 1 September 1990 and 28 February 1991. HIV testing was performed on clinical grounds. Epidemiological data were obtained by KER interviewing 23 consecutive HIV positive patients attending an outpatient clinic, using a structured questionnaire.

There were 1041 medical admissions (666 men, 375 women) and 121 (12%) cases (116 patients) were HIV positive (15% of men, 5% of women). The number of negative HIV results is unknown. The admissions comprised 98 men (mean age 36.5 years, range 22-52) and 18 women (mean age 30.4 years, range 17-55). HIV status was previously unknown in 74%. The presenting diagnoses are shown in the table. Neuropsychiatric

Table 1 Medical diagnoses in HIV positive patients

Diagnosis (%)	Male n = 98	Female n = 18	Total n = 116
Pulmonary tuberculosis	21	7	28 (24)
Neuro-psychiatric disease	14	2	16 (14)
Herpes zoster	7	2	9 (8)
Gastroenteritis	8	0	8 (7)
Bacterial pneumonia	8	1	9 (8)
Malaria	3	2	5 (4)
Urinary tract infection	5	0	5 (4)
Pyrexia of unknown origin	3	1	4 (3)
Anaemia of unknown cause	1	2	3 (3)
Nephrotic syndrome	1	1	2 (2)
<i>Salmonella typhi</i>	1	0	1 (1)
<i>Salmonella paratyphi</i>	1	0	1 (1)
Histoplasmosis	1	0	1 (1)
Bubonic plague	1	0	1 (1)
Eczema	1	0	1 (1)
Perianal abscess	1	0	1 (1)
Oesophagitis	1	0	1 (1)
Hodgkin's disease	1	0	1 (1)
Unknown	22	0	22 (19)